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### Encomium: Rolliin Harold Baker: 1916-2007

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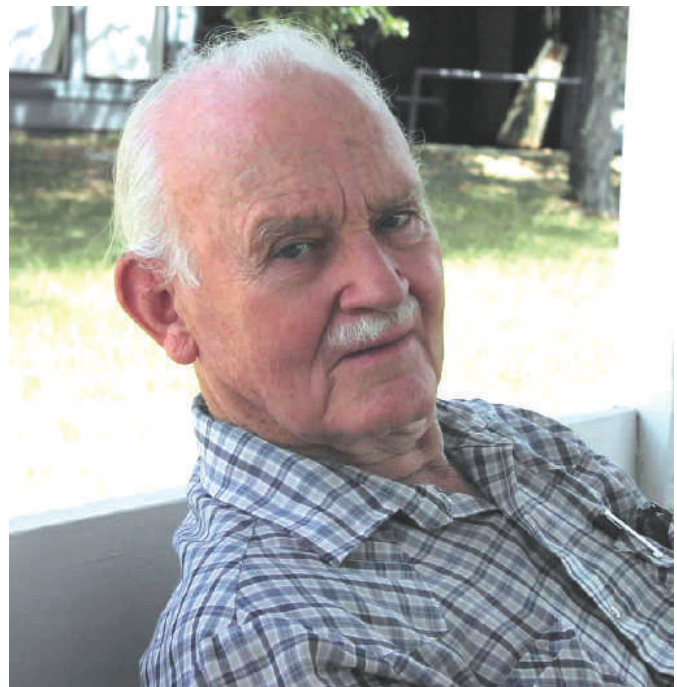
## ENCOMIUM

### ROLLIN HAROLD BAKER: 1916–2007

Rollin H. Baker passed away on 12 November 2007, 1 day after reaching his 91st birthday. Rollin was a living legend, famous for his pioneering research on biogeography and natural history of Mexican mammals, especially rodents, for his contributions to the understanding of Michigan mammals, and for being a mentor and friend to all young, aspiring mammalogists. Rollin Baker's career lasted way beyond his traditional retirement, and in his final months he was still active in the Texas Society of Mammalogists and in conservation issues in Texas. Indeed, when he was 89 years old he presented a guest lecture in mammalogy for appreciative graduate students at Texas Tech University.

Rollin was born in Cordova, Illinois, on 11 November 1916 but grew up in Texas, the state that he always considered home. His childhood interest in the natural world was encouraged and supported by his parents. In his autobiography, published in *Going Afield* (Baker 2005), Rollin explained that his focus on mammals largely grew from reading classic works by Seton, Burgess, and Hornaday. He also described how, at age 11, he collected his 1st cotton rats near his home in Houston and carted them home, alive, in his wagon! This early experience not only piqued his curiosity but also literally began a life-long fascination with the cotton rat. Ultimately, Rollin shaped a career around his interest in nature and the outdoors, and this is what engaged him intellectually and emotionally until the end of his life. Along the trail of his life, he made wonderful and lasting contributions as a scientist, educator, historian, raconteur, and warm-hearted friend. As he often put it, his fondness for small mammals was rooted in emotion rather than in a cold-hearted “use” of nature's noblemen as a means to test dispassionate hypotheses. Rollin's curiosity about small mammals and their secret lives drove and characterized most of his research, and it should be no surprise that most of his students acquired similar interests or, at the very least, shared his wonder at the diversity, distribution, and history of small mammals.

Rollin began his formal education with a B.A. in zoology from the University of Texas in 1937. While at the University of Texas, he was a member of an NCAA All-American Swimming Team in 1936 and recipient of the Nagel Trophy for “Sportsmanship” in 1937. For his lifetime commitment to the swimming program, he received the Frank Irwin Award “for Outstanding Achievements and Contributions to Texas Swimming” in 1992. He completed an M.S. in entomology from Texas A&M University in 1938 and a Ph.D. in zoology from the University of Kansas in 1948. In his autobiography, Rollin wrote that his professional life as a mammalogist began



Rollin H. Baker, still youthful in his 80s, at his home in Eagle Lake, Texas. Photograph kindly supplied by his family.

after his M.S. when he seized an opportunity to explore mammalogy with guidance and collaboration from William B. Davis and Walter P. Taylor, both of whom resided at Texas A&M. Rollin took a position with the Texas Game, Fish, and Oyster Commission that focused on game animals rather than small mammals, and Rollin relished the fieldwork. It was probably in rural Texas that Rollin developed his immense people skills—a feature of his personality that endeared him to strangers, friends, students, and colleagues. Another even more important aspect of Rollin's sojourn as a game biologist in Texas involved a woman named Mary Waddell. Mary, the daughter of an Eagle Lake game warden, married Rollin on 22 March 1939. Together they raised a daughter, Elizabeth Alice, and 2 sons, Bruce Rollin and Byron Laurence.

Rollin Baker was very family-oriented. Mary frequently accompanied him on field trips to Mexico, which became their favorite haunt. Rollin's children took great pride in their Dad as evidenced by what they recently wrote about him: “When Dad was thirteen years old, he wrote, ‘When I grow up I want to be a naturalist and a traveler.’ He achieved those goals, and far more. A brilliant teacher, dedicated mammalogist, tireless field biologist, lifelong conservationist, still working on

journal articles the week that he died ... he was our father, and we loved him so.”

The early part of Rollin's career in mammalogy was interrupted by World War II. After enlisting in the Navy in 1943, Rollin was assigned to duty on a submarine-chasing destroyer in the North Atlantic. He described the destruction of a German submarine—marked only by a spreading oil slick—as 1 of the sobering experiences of this duty. In 1944, Lt. Rollin Baker was selected as a member of Naval Medical Research Unit 2 (NAMRU-2), which trained at Rockefeller University and deployed to the South Pacific. Members of this novel organization included mammalogists and entomologists led by the famous epidemiologist Captain Thomas Rivers (Baker 1994). In principle, NAMRU-2 was created as a means of conducting research on zoonotic diseases and providing force protection in the form of health guidance for ground forces engaged on the Pacific islands. Rollin used his time in the Pacific as a springboard to his dissertation on *The Avifauna of Micronesia, Its Origin, Evolution, and Distribution* (1951, University of Kansas Publications, Museum of Natural History, 3:1–359).

Rollin Baker's 1st postwar academic position was at the University of Kansas, where in 1948 he replaced Donald F. Hoffmeister and E. Lendell Cockrum as Curator of Mammals in the Museum of Natural History. Rollin participated in, or at times unilaterally provided, mentorship for young mammalogists. In some instances, he generously acted as a surrogate for the Museum Director, E. Raymond Hall. Many of these students, including J. Knox Jones, Jr., James S. Findley, Sydney Anderson, and Robert L. Packard, became significant leaders in the discipline. In fact, Rollin Baker described the era as “what one might call the greatest 10-year (1946–1955) production line of graduate students of mammalogy (Baker, in manuscript).” During his time at the University of Kansas, he served as the academic advisor for 2 Ph.D. students—Maurice Baker and Howard Stains.

Among tales from Rollin's time at Kansas, undoubtedly the most famous is known as the “Hoot” Baker affair. Baker's pal, Jim Findley, has explained that it all began on a field trip when Rollin misidentified a skinned bird carcass as ‘pheasant’ rather than owl and insisted on frying it for breakfast (Findley, J., 2005, *Mammalogical reminiscences*, pp. 171–183 in *Going afield: lifetime experiences in exploration, science, and the biology of mammals* [C. J. Phillips and C. Jones, eds.], Museum of Texas Tech University, Lubbock). The story took on a life of its own when the Kansas student newspaper published a news item titled *Professor Eats Owl*. For the rest of Rollin's life, he was widely known as Hoot Baker.

From Kansas, Rollin moved to East Lansing in 1955 where he held professorships in 2 academic departments—Zoology and Fisheries and Wildlife—and served as Director of the Museum at Michigan State University. Rollin served the university from 1955 until official retirement in 1982. At Michigan State, Rollin's main scientific focus was on the biogeography of mammals in Mexico, which built on an interest that he developed while at Kansas. For 1 particular

study, he expanded into Middle America and assessed 370 mammal species in the context of geographical barriers, speciation, and zones of intergradations (Baker 1963). To accomplish this seminal research, which was both unique and visionary for its time, Baker recorded a monumental amount of distributional and taxonomic data on computer punch cards and used a metal rod to sort the cards by categories. By using this manual methodology, decades before search engines and desktop computational power, Baker was able to analyze complex data and gain new insights.

Rollin conducted regular summer field trips to Mexico, which became a traditional activity for his (and other faculty members) graduate and undergraduate research students. Thinking that students and the public would be interested in this fieldwork, he frequently invited a cinematographer to accompany him. As a result, some of his expeditions are documented, and today 15,000 feet of 16-mm film are archived in the Special Collections of the Southwest Collections at Texas Tech University. Aside from his interest in the biogeography of Mexican mammals, Rollin also recognized the need for a general book on mammals in Michigan. Rollin's book on the subject, *Michigan Mammals*, is 642 pages of carefully collected information and an inspiration to students of mammalogy and a tremendous resource for citizens interested in the state's fauna and its conservation.

While at Michigan State University, Rollin Baker regularly taught undergraduate and graduate courses in mammalogy and zoogeography, served on many student committees (especially in the Department of Fisheries and Wildlife), and directly mentored 24 Ph.D. candidates to completion of their degrees. They are Thom Alcoze, Bruce Becker, Don Christian, Stephen Collett, Peter Dalby, Gary Dawson, James Dietz, John Enders, Ronald Field, John Fitch, J. Keever Greer, Jerry Hall, Gary Heidt, John Helm, Gary Holcomb, Jorge Jimenez, John Matson, Eustorgio Mendez, Michael Petersen, Ward Rudersdorf, Karl Shump, Jr., Max Terman, William Teska, and Ann Underhill.

Rollin saw to it that natural history and a love of field studies were the unifying academic theme among all students who worked with him in the Museum's mammal range. One of his former students, Don Christian, expressed it this way: “Doc was dually motivated by scientific interests in animals in natural environments and by an abiding curiosity about and appreciation for the aesthetics of animals and nature. His students carried away from our work with him a love of being in the field, of working with and learning about animals, and of solving scientific problems.”

Rollin Baker also saw to it that undergraduates were always welcome. In that regard, he mentored 1 of us (CJP), beginning with a National Science Foundation Undergraduate Fellowship in 1962–1963. His mentorship included 2 field trips to Mexico (1963 and 1964) and joint publications on small mammals (Baker and Phillips 1965, 1965). Kurt Dewhurst, who succeeded Rollin as the Director of the Museum, remarked: “Rollin served as the Director of the museum for 27 years and also was a highly productive scholar and teacher

at MSU. He has left a remarkable legacy for us here at the museum in so many ways. He had a great ability to motivate students—always encouraging them to do fieldwork and publish! As a result, he touched many students' lives in lasting ways as they found academic and curatorial positions and often work in state DNR departments. For those of us who had the good fortune to know him well, we always appreciated his remarkable broad range of interests including literature, politics, sports ... and his lively sense of humor."

When Rollin Baker "retired," he and Mary returned to Texas and resided in Eagle Lake. One could say that he left employment at Michigan State and created a new career in which he returned to his roots—Texas wildlife—and also developed his skills as a novelist. In 2007, at the young age of 89, he wrote new essays on mammals that were printed by the Texas Society of Mammalogists, drafted a fascinating (but currently unpublished) memoir about his experiences working with E. Raymond Hall at the University of Kansas, updated his previous description of his experience in NAMRU-2, and wrote and published 4 more historical novels about Texas! Rollin was a member of the Kiwanis Club in Lawrence, Kansas, from 1949 to 1955 and in East Lansing, Michigan, for nearly 30 years, a member of the Rotary Club in Eagle Lake, Texas, beginning in 1987, and a member of the Colorado County (Texas) Historical Commission.

Rollin Baker was a member of at least 15 scientific societies, but in his later years, he was especially active in the Texas Society of Mammalogists, serving as the Society's 2nd President in 1984 and 1985 and becoming an honorary member in 1986. Rollin served on the Board of Directors of the American Society of Mammalogists from 1958 to 1978 and became a Patron Member of the Society in 2001. He served as an Associate Editor of the *Journal of Mammalogy* from 1960 to 1966 and of the *American Midland Naturalist* from 1962 to 1967. He was an elected member of the Board of Directors of the Society of Systematic Zoology from 1958 to 1960. Rollin described 27 taxa of mammals new to science, and he was honored with patronyms for 7 taxa of animals, including a fossil cotton rat, *Sigmodon bakeri* Webb.

Rollin Baker's legacy as a mammalogist is significant; he was a bridge between the original North American mammalogists and the post-World War II generation of mammalogists who created the academic field as we know it today. Rollin Baker helped promote the transition between pure traditional natural history and taxonomy to systematics and ecology, which now dominate the field. He also exemplified how teaching and research can be combined into an almost seamless activity. Rollin was mindful of his role as a professor and was keenly interested in the historical progression of mammalogy. Future students of the history of mammalogy will be able to study Rollin Baker's ideas and career experiences in his autobiographical writing (Baker 2005), informal memoirs (Special Collections/Southwest Collection at Texas Tech University), or in his recorded oral recollections and films documenting his fieldwork in Mexico (also Special Collections/Southwest Collection at Texas Tech University).

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